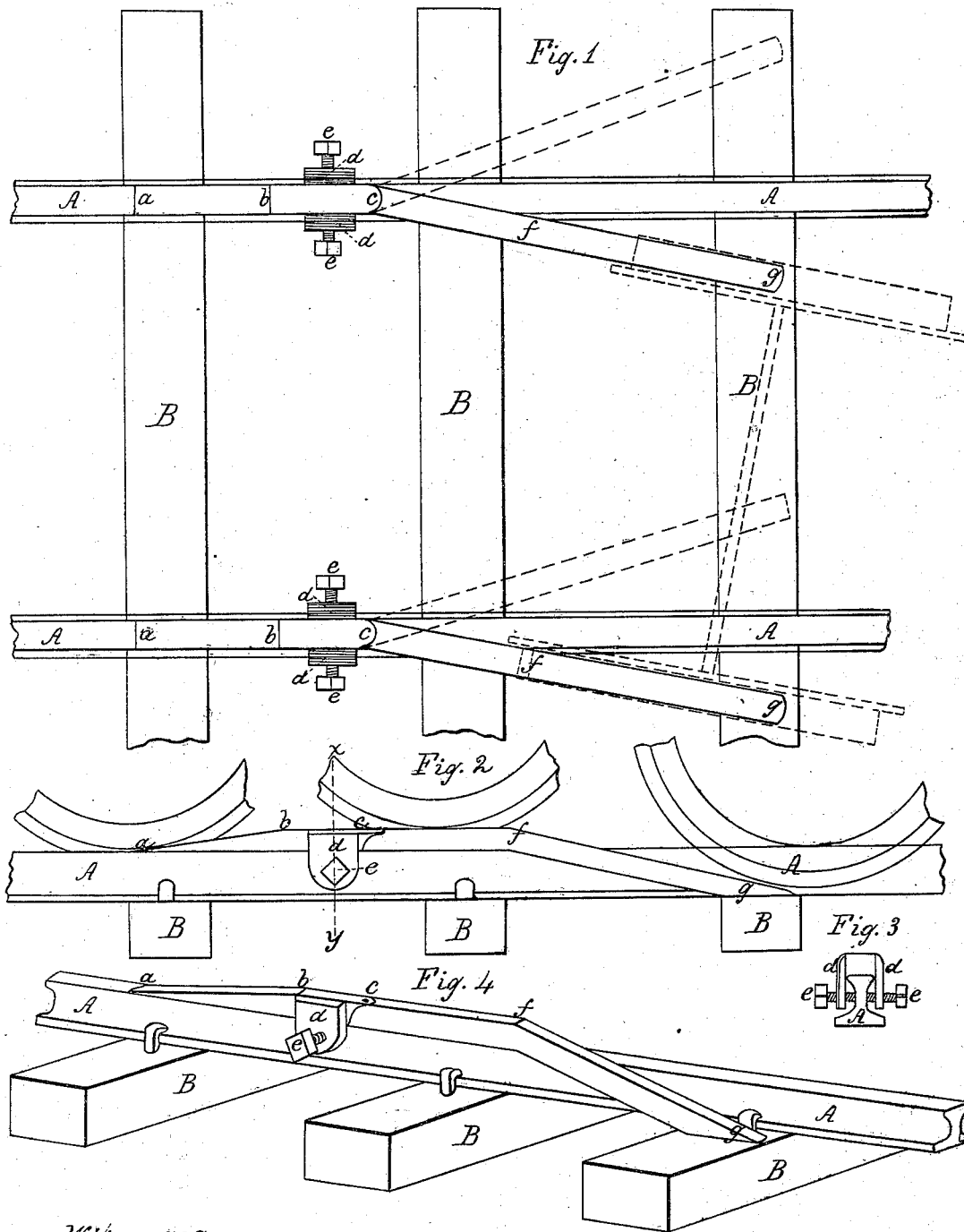


T.B. Purvis,
 Portable Switch,
 No. 54770,
 Patented May 15, 1866.



Witnesses,
Richd. Vanick D. Mott
A. V. D. Mott

Inventor
 Thomas B. Purvis

UNITED STATES PATENT OFFICE.

THOMAS B. PURVES, OF GREENBUSH, NEW YORK.

IMPROVED RAILROAD-SWITCH.

Specification forming part of Letters Patent No. 54,770, dated May 15, 1866.

To all whom it may concern:

Be it known that I, THOMAS B. PURVES, of the village of Greenbush, Rensselaer county, State of New York, have invented a new and useful portable switch for the purpose of replacing cars upon the track of railroads that may have been run off of them; and I declare the following specification, with the drawings forming part thereof, to be a full and complete description of my invention.

Figure 1 is a plan view of a railroad-track with my switch attached. Fig. 2 is a profile of a rail with the switch attached. Fig. 3 is a cross-section of the rail and switch in the line of *xy*, Fig. 2. Fig. 4 is a perspective view of the rail with switch attached.

A is the permanent rail, lying upon B, the sleepers.

The switch consists of a bar of iron, *abc*, of the width of the rail, from *b* to *c* high enough to carry the flange of a car-wheel clear of the rail, and from *b* to *a* sloping down to the rail. The part *bc* has projecting from its sides and extending downward on each side of the rail lugs *d*, through which set-screws *e* work to secure the switch to the rail. From *c* to *g* a switch-bar extends in cross-section, similar to *bc*, and from *c* to *f* aligns horizontally with it. From *f* to *g* the bar inclines downward, so that its foot *g* is on a level with the bottom of the rail A. At *c* this bar is hinged to *ac*, so as to have a horizontal movement to the right and left hand, to meet the position of any untracked car. The position of this hinge is important.

Switches have been made with hinged limbs for the purpose of adjusting them at variable angles to meet the position of the wheels of the car to be retracted, and the hinge has been placed for that purpose on one side of the switch-bar in order to permit the inclined limb

of the switch which descends directly from the hinge from interfering with the rail. This arrangement makes it necessary to be provided with two pairs of switches, one pair being hinged on the right-hand side and the other on the left-hand side of the bar, to meet the chances of the cars being on the right or left side of the track.

What is peculiar in my mode of construction is the making of that part of the switch-bar from *c* to *f* align with *bc*, and then commencing the downward slope from *f* to *g* instead of at the hinge. This permits the pivoting of the bar over the center of the rail A, and gives the ability to shift the switch to either side of the rail, since the sloping part is carried clear of the rail by the horizontal position and projection of *cf*, as shown in the drawings. The consequence of this arrangement is that one pair of switch-bars will meet any contingency in the position of cars off the track.

The mode of using this switch is so manifest from the above description and the drawings as to require no special description.

What I claim as my invention, and desire to secure by Letters Patent, is—

The construction of a portable switch for the purpose of placing cars upon a railroad track by the combination of the bar *abc*, secured, as described, to the rail, with a movable limb, *cfg*, formed as shown, and hinged or pivoted to it over the center of the rail, substantially as described, and for the purposes set forth in this specification.

THOMAS B. PURVES.

Witnesses:

RICHD. VARICK DE WITT,
A. V. DE WITT.